

Report

Striving to promote a partnership between government, academia & business

MSTA Board Invests in Five Technology Projects

The Montana Science and Technology board of directors voted unanimously on Tuesday, April 8, 1986, to make technology investments in four projects — Western Energy Company, Alternative Diagnostix, Inc., GeoResearch, Inc., and Ercon Systems, Inc. In addition, the board voted during an electronic telephone conference call meeting on Friday, April 11, 1986, to make an additional investment in a project proposed by the Montana International Trade Commission.

Funds committed to the five projects total \$850,000, bringing the total investment commitments made to date by the Alliance to just over \$1 million.

The board voted to invest in Western Energy Company's coal beneficiation project to conduct an engineering study of a process for removing moisture, ash and sulfur from the coal mined in the state. The study is expected to provide the basis for construction in 1987 of a demonstration-scale plant in the Miles City area. That in turn could lead to a decision by WECO to construct three more operational-scale processing plants in the same area. Some 250 jobs are expected to be created in southeastern Montana as a result of the project.

Western Energy will receive half of the requested \$350,000, matched by an equal amount from the company, to begin the engineering work and the remainder of the requested funds will be provided if the company receives an \$8 million grant from the U.S. Department of Energy for actual construction of the demonstration plant.

The board also voted to invest in Alternative Diagnostix, Inc., a Missoula company founded by Dr. Charles McLaughlin, a Drummond native. The company plans to develop immunological test devices for use in doctors' offices, small medical laboratories, and, eventually for over-the-counter sale for in-home use to

Cattle stall for GeoResearch's Remote Electronic Animal Data System

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detected sexually transmitted diseases and other infections.

The company will receive half of the \$250,000 investment upon completion of the contract negotiations with the Alliance and the second half upon Federal Drug Administration approval of

at least one of the proposed diagnostic tests. ADI will provide an additional \$500,000 from other investors as matching funds. ADI expects to achieve approximately \$47 million in sales and employ between 150 and 200 people by the fifth year of operation.

The third project approved by the board for investment was that of GeoResearch, Inc., of Billings, headed by Dr. Douglas Richardson, to develop and sell the prototype units of its Remote Electronic Animal Data Systems. The first units will be in place this summer in the Miles City area and will be used to remotely collect data on cattle (such as weight, water consumption, and related weather conditions) and then transmit, analyze and store the data on a centralized computer.

The company will match the state's \$180,000 investment with \$320,000 from a U.S. Department of Agriculture



grant and private investors. If successful, the company expects to employ an additional 51 people by the end of its fifth year of operation.

The board also voted to invest in Ercon System Inc., of Great Falls. The company, headed by Don Chevalier, will use the \$20,000 investment, matched with an equal amount from private investors, to develop the prototype machines necessary for production of the company's erosion control matting product and to install samples in test sites throughout Montana.

The company plans to use the matting, made of woven strips from used tires, to control stream bank and construction-related erosion. The test sites will be used to assess the technical success and commercial potential of the product. The board encouraged the company to come back to the Alliance for additional funding for full

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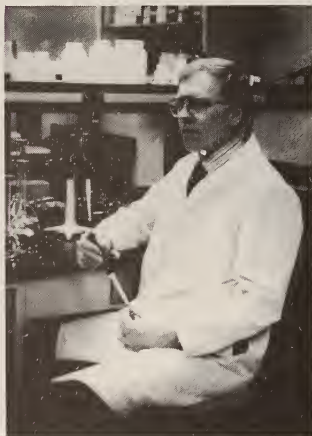
commercialization if the test results are positive.

In a special meeting conducted on Friday, April 11, the board voted to reverse action of earlier in the week and invest in a project proposed by the Montana International Trade Commission. The project would study the feasibility of adapting Scandinavian furniture manufacturing technology to Montana's wood products industry to produce items for sale to both domestic and foreign markets. The study will also

look at possible joint ventures with Scandinavian firms and marketing relationships with Pacific rim countries.

R. Stephen Browning, chairman of the Alliance board, expressed pleasure over the continuing high quality of the projects the board is considering. "Once again we feel that we have invested in a series of projects which can have a major positive impact on our state's economy," Browning said. "We only hope that these kinds of projects continue to come our way."

Alternative Diagnostix to Manufacture Novel Immunological Test Devices



Dr. Charles McLaughlin, founder of
Alternative Diagnostix

Alternative Diagnostix, Inc., was founded in 1983 by Dr. Charles McLaughlin to develop and manufacture diagnostic tests for the detection of infectious diseases in humans and animals. The first tests produced by the company were for the diagnosis of sexually transmitted diseases in humans. This and related tests are state-of-the-art means for detecting the presence of microbial organisms.

Dr. McLaughlin was born and raised in Drummond. Educated in Montana, Washington and Wisconsin, he is a veterinarian and has also had extensive training and experience as a medical researcher, working for a time at the National Institute of Health laboratories in cancer research. He has

also been the recipient of several NIH research grants.

With the Alliance's funding of ADI, Montana is well on the way to seeing a premier center for biotechnology-chemistry research, development and commercialization established in the Bitterroot Valley in the western part of the state. In addition to ADI, both ChromatoChem, Inc. and Ribbi Immunochem Research Inc., of Hamilton, are also active in biotechnology research, product development and manufacturing. ChromatoChem, recipient of an earlier Alliance investment, is in the process of relocating to Missoula from California and specializes in the development and manufacture of high value-added chemicals and biochemicals for the high performance affinity chromatography market. Ribbi Immunochem Research, located in Hamilton, is a leader in the field of biotechnology. The University of Montana is also active in biotechnological research and development, both independently and in association with the companies.

The potential economic impact on Montana is significant. One major benefit is the anticipated increase in jobs in the Missoula area. By the year 1991, the number of jobs created by ChromatoChem is expected to be 150, while Alternative Diagnostix anticipates employing as many as 200 people. This also means that an equal number of support jobs in other areas will also be created in the Missoula area. Another benefit is the increased tax revenues which should accrue to both local and state governments. Both companies are at the cutting edge of their respective technologies and anticipate high levels of sales. This translates into more tax dollars, both for the Missoula area and the state.

Western Energy Company to Study Development of Beneficiated Coal Process

Western Energy Company, a Butte subsidiary of the Montana Power Company, is undertaking a coal beneficiation project with the joint cooperation of MultiTech, a Butte engineering consulting firm, and the Montana College of Mineral Science and Technology. The project will entail a process engineering study for removal of moisture, ash and sulfur from coal mined in Montana. If the process proves technically feasible, WECO plans to begin construction of a demonstration plant in the Miles City area in 1987.

A unique aspect of this project is it involves using money generated by the coal severance tax and could ultimately result in an increase in revenues to the coal tax fund. The Alliance's capital base of \$1.7 million earmarked for technology investments comes from the alternative energy and conservation account, whose funds are generated from coal severance tax revenues. The sale of the processed coal will not only generate a return on investment to the Alliance, but will also generate increased coal severance tax



WECO's beneficiated coal at a test site near Butte

revenues, as well as increased tax dollars both for local and state governments.

Another significant potential benefit of the project is the potential for job creation. If the demonstration plant is successful, the company expects to employ between 200 to 250 people in the Miles City area by 1990 and eventually build three full scale coal processing plants by 1999. This also means an additional like number of support jobs in the Miles City area as well as an unspecified number of new administrative support jobs in the Butte area.

Diversity of Knowledge and Wealth of Experience Characterize MSTa Board of Directors

The 15-member MSTa board of directors represents a rich diversity of knowledge and a wealth of experience that has proven invaluable in making technology investment decisions. The 15-member board was appointed by Governor Schwinden in August of 1985. The required eleven members from the private sector bring to the board a variety of talents and private enterprise experience, while the four public members add an understanding of government and higher education that has been particularly relevant to the projects considered so far. The following individuals are members of the board of directors:

Stephen Browning, chairman of the board, is an attorney at law with the Helena law firm of Browning, Kaleczyc, Berry and Hoven. Mr. Browning brings to the board extensive legal experience as well as intimate knowledge of federal and state government, the former acquired while he served as chief of staff for Senator Max Baucus in Washington, D.C.

Jon Marchi, chairman of the board's investment committee, is a rancher in Polson. Prior to 1985, Mr. Marchi was vice president for marketing and adminis-

tration for D.A. Davidson Co. in Great Falls. He brings to the Alliance his considerable knowledge of private sector finance and investment analysis.

Carol Daly, chairman of the board's technology transfer committee, is the owner of Sunrift Associates, an economic development consulting firm, and is the co-owner of JBM, Inc., a precision machine shop, both located in Kalispell. She has extensive experience with state and local economic development efforts and also serves as vice chairman of the Governor's Council on Economic Development.

Lloyd Allen brings to the board his experience in the chemical industry, from his employment with Dow Chemical Company and currently as the development and marketing manager at Yellowstone International, Inc. in Billings. He is currently focusing on developing middle and far eastern markets for the "baladi bread" product developed by microbiologists at Montana State University.

Richard Conover, a lawyer in private practice in Bozeman, specializes in the intellectual property field, especially patents, copyrights and trademarks—all

areas of prime importance in technology development.

Russell Hudson brings to the board his extensive knowledge of the forest products industry, acquired through many years of experience with timber companies in Montana. Currently he is the Libby operations manager for Champion Timberlands.

James Jenks is a successful farmer and rancher from Hogeland. He serves on U.S. Wheat Associates and on the Montana Wheat Research and Marketing Committee, including one year as chairman of each organization.

Richard Johnson is the chief chemist at the Billings office of O-Tech, Inc., a consulting firm specializing in petroleum and energy fields. He was also very active in the deliberations of the original Advisory Council on Science and Technology.

Daniel Regan brings to the board his expertise in the areas of engineering and energy development. He serves as vice president of consumer services, conservation and industrial marketing for the Montana Power Company in Butte.

Raymon Thompson is founder and president of Semitool, Inc., a Kalispell firm which produces semiconductor process equipment. Having served as chairman of the Advisory Council on Science and Technology, he also brings to the board his experience in the computer and microelectronics fields.

Leland Walker is the chairman of the board of directors for Northern Engineering and Testing, Inc., an engineering consulting firm located in Great Falls. He has extensive experience in engineering gained from both public and private practice. He also served as a member of the original Advisory Council.

Keith Colbo is the director of the Department of Commerce in Helena. Besides his current experience, he brings to the board his knowledge gained from numerous years of public service at the state level in Montana.

Donald Peoples serves as the chief executive officer of the Butte-Silver Bow Government. His knowledge of the workings and needs of local government has proven invaluable to the board.

William Tietz is the president of Montana State University and brings to the board his input of the considerable assets and wealth of programs available through the Montana University System as well as at MSU.

Neil Bucklew, formerly president of the University of Montana, was the fourth public member of the board, but resigned when he left the University in April 1986. His replacement has not yet been chosen.

Summary of MSTA Funding Requests

(as of May 10, 1986)

Inquiries	118
Executive Summaries	44
Summaries with University Participation	23
Formal Proposals	17
Alliance Funds Requested in Summaries	\$ 5,355,786
Private Matching Funds	\$ 10,602,012
Project Costs from Summaries	\$ 15,957,798

Funding Requests by Program Category

Research and Development	17 summaries	\$ 1,916,614
Seed Capital	20 summaries	\$ 3,086,500
Technology Transfer	7 summaries	\$ 352,672

Funding Requests by Geographic Region

Bozeman	13	Billings	2
Butte	6	Helena	2
Missoula	6	Out-of-State	3
Great Falls	3		
Anaconda, Broadview, Corvallis, Kalispell, Lewistown, Libby, Scobey, Sidney, Whitefish			1 each

MSTA Meetings

June 3, 1986

MSTA Committees

July 8, 1986

MSTA Board of Directors

Department of Commerce

1424 Ninth Avenue

Helena, Montana

Project Application Deadlines

Quarterly deadlines for formal application for funding are January 1, April 1, July 1, or October 1.

Next deadline is July 1, 1986

If you want more information,

Contact MSTA at:
(406) 444-3707
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